

## CLAIMS

1) A device for generating a magnetic field moving  
in at least one magnetic field plane located in a given  
5 medium and in which the vector product of the intensity  
of the magnetic field by its natural displacement  
velocity creates stereochemical deformations in the  
molecules of said given medium;

said device being characterised in that at least a  
10 first means for generating a first magnetic field and a  
second means for generating a second magnetic field are  
placed in each magnetic field plane, the directions of  
said first and second magnetic fields subtending between  
them a predefined angle  $\theta$  and at least one of said first  
15 and second magnetic fields being of an amplitude which  
can be varied over time so that the resultant of said  
first and second magnetic fields is a magnetic field  
moving in said field plane having an amplitude which is  
variable over time and a direction moving at a variable  
20 angular velocity so as to obtain as high a gradient as  
possible of said vector product.

2) A device as claimed in claim 1, in which said  
first means for generating a magnetic field is a  
permanent magnet or a pair of permanent magnets (30, 30')  
25 and the second means for generating a magnetic field is  
a coil or a pair of coils (32, 32') to which is applied  
a current whose intensity can be varied over time so that  
the resultant magnetic field is a moving magnetic field  
oscillating (Fig. 6B and 6C) between two positions  
30 corresponding to the two maximum values, in absolute  
value, of the intensity flowing through the coil(s).

18

3) A device as claimed in claim 1, in which said first means for generating a magnetic field is a coil or a pair of coils (10, 10') and the second means for generating a magnetic field is a coil or a pair of coils (12, 12'), the currents applied to each coil or pair of coils being of variable amplitudes and frequencies and bearing no relation to one another.

4) A device as claimed in claim 3, in which the current applied to the coil or coils of said first means for generating a magnetic field (10, 10') and the current applied to the coil or coils of said second means for generating a magnetic field (12, 12') are sinusoidal currents of the same frequency but of different amplitudes and being shifted in phase by 90°.

5) A device as claimed in claim 3, in which the current applied to the coil or coils of said first means for generating a magnetic field (10, 10') and the current applied to the coil or coils of said second means for generating a magnetic field are sinusoidal currents of the same amplitude but different frequency.

6) A device as claimed in one of claims 1 to 5, in which said given medium is a fluid flowing through a pipe (20), said first and second means for generating a magnetic field being disposed on the exterior of said pipe (figures 1 and 6A).

7) A device as claimed in one of claims 1 to 5, in which said given medium is a fluid flowing through a pipe (20), said first and second means for generating a magnetic field being disposed inside said pipe (figure 8).

8) A device as claimed in claim 6 or 7, in which

said magnetic field plane(s) form(s) an angle of between 45 and 90° with the direction of flow of the fluid to be treated.

9) A device as claimed in one of claims 1 to 8,  
5 having several parallel magnetic field planes (figures 9 and 10).

10) A device as claimed in one of claims 1 to 9, in which said means for generating a magnetic field of variable amplitude comprises a pair of coils (10, 10')  
10 having a core of a ferromagnetic substance to close the magnetic fields generated by said coils, said core optionally being U-shaped (16), in which case the magnetic field generated occurs in two parallel planes (figure 2), or E-shaped (16) in which case the magnetic  
15 field generated occurs in three parallel planes (figure 3).

11) A device as claimed in one of claims 1 to 10, in which said given medium is a limestone water, the application of the magnetic field generated preventing  
20 the deposit of limestone incrustations on the walls of pipes, boilers, etc...

12) A device as claimed in one of claims 1 to 10, in which said given medium is a fuel for a heat engine, the application of the magnetic field generated enabling said  
25 fuel to enhance and improve combustion efficiency.